

CLEAN VERSION OF SUBSTITUTE SPECIFICATION
PNEUMATIC NODE FOR COMPRESSION ELEMENTS

BACKGROUND OF THE INVENTION

Technical Field

The present invention relates to a joint element for pneumatic structural elements and associated connecting elements.

History of the Related Art

Joint elements for non-pneumatic structural elements are known per se, for example going by the name of MERO systems. The task of these joint elements is to introduce tensile and compressive forces, in a manner free of bending moments, into framework structures. A pneumatic structural element is known, for example, from European Patent Application 01 903 559.1 of the same inventor. The operation of connecting the structural element described in this document to a joint using known means, however, is not without problems since bending moments produced from the reaction to bearing pressure cannot be completely avoided without excessive outlay in respect of auxiliary structural means.

The object of the present invention is to provide a joint element which allows the tensile, compressive and bearing forces to be brought together without the occurrence of local bending moments and which, furthermore, also allows the bearing forces to be introduced into known and conventional structural elements.

BRIEF DESCRIPTION OF THE DRAWINGS

A more complete understanding of the device of the present invention may be obtained by reference to the following Detailed Description, when taken in conjunction with the accompanying Drawings, wherein:

FIG. 1a is a side elevational view of a prior art pneumatic structural element;

FIG. 1b is a front cross-sectional view of the prior art pneumatic structural element of FIG. 1a;